

# Mid-Atlantic Energy Programs

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# Mid-Atlantic Energy Programs



- **Navy Energy Special Projects:**
  - Funded by Navy Operations & Maintenance funding, Energy SRM program established as a separate SRM allocation in FY12.
  - Targets aging & inefficient facility & infrastructure upgrades & repairs with financial payback.
  - eROI scoring tool helps prioritize projects
- **MILCON Program - Energy projects**
  - Emerging program that focuses on large scale energy projects with significant cost savings that exceed SRM Minor construction threshold
  - **Energy Conservation Investment Program (ECIP)**
    - Part of MILCON program, projects btwn \$300K - \$4M
    - Must be renewable (solar, wind, etc)
- **Major Maintenance & Repair Program (MMRP) Energy Projects**
  - **Financed by Navy Working Capital Fund Program**

# Mid-Atlantic Energy Programs (cont.)



- **Financed Energy Projects**

- **Energy Saving Performance Contracts (ESPC)**

- Contracts with Energy Service Companies (ESCOs)
    - Guaranteed savings, usually include O&M throughout repayment term

- **Utility Energy Savings Contracts (UESC)**

- Utility sponsored programs
    - Quicker to implement than ESPC, typically smaller in scope

# FY11 MILCON Projects

## Acquisition Tools & Milestones



P No.	Project Name	Activity	Project Dollar Amount	Project Type	Design Level	Acquisition Method	Acquisition Tool	Issue IFB/RFP	Current Project Award Date
<b>Financed Projects</b>									
<b>TBD</b>	Steam Decentralization, Lighting, Water, DDC	Mechanicsburg PA	TBD	ESPC	DB	TBD	TBD	TBD	TBD
<b>ECIP Projects</b>									
P1030	Solar Ventilation Preheat	JEB Little Creek VA	\$ 750,000	ECIP	DBB	Sole Source	8(a) SS	5/17/11	7/25/11
P205	Solar Thermal Collectors on 3 Bldgs for DHW & Bldg Heat	Newport RI	\$1,500,000	ECIP	TBD	TBD	TBD	5/15/11	9/27/11
P328	Solar Ventilation Pre-heat	Maine NSY	\$500, 000	ECIP	DB	SAP	MAC 8(a)	5/21/11	9/30/11

# FY12 MMRP Energy Projects Acquisition Tools & Milestones



Project Name	Activity	Project Dollar Amount (\$000)	Design Level	AQ Tool	Issue IFB/RFP	Current Projected Award Date
Sewer Inflow & Infiltration Repairs	PORTSMOUTH NSY	250 - 500	DBB	TBD	8/19/11	10/19/11
Steven St Air Line PH2	NORFOLK NSY	500 - 1,000	DBB	TBD	9/6/11	10/31/11
Steven St Compressed Air Replacement PH3	NORFOLK NSY	250 - 500	DBB	TDB	9/6/11	10/31/11
Repair and Replace Gravity Sewer	NWS YORKTOWN	1,000 - 5,000	DBB	MAC - 8A	11/24/11	12/15/11
Replace Steam Line at Quaywall	JEB LITTLE CREEK VA	1,000 - 5,000	DBB	IDIQ - Constr.	11/3/11	12/16/11
Area Steam Lines - Scott Ctr	NORFOLK NSY	500 - 1,000	DBB	TBD	12/6/11	1/31/12
Steam Dist CP - Replace Steam and Condensate Lines , Bldg 293 TO MH 2-37	NS NEWPORT RI	1,000 - 5,000	DBB	MAC - 8A	11/15/11	2/1/12
Steam Line Reroute - DD2 & DD3	NORFOLK NSY	500 - 1,000	DBB	TBD	1/5/12	2/29/12
Replace Steam and Condensate Lines, NUWC PHASE 2	NS NEWPORT RI	TBD	TBD	TBD	TBD	TBD
Replace Steam Bldg 271 South	NORFOLK NSY	TBD	TBD	TBD	TBD	TBD

# **FY12 Energy Program (MILCON) Highlights**



- **PB-12 (tentative until Congress Authorizes/Appropriates)**
  - **P197, Steam Decentralization, Norfolk, VA , ~ \$26 million**

# FY12 Energy Program (SRM) Highlights



- **PB-12 (tentative until Congress Authorizes/Appropriates)**
  - **Approximately 21 projects selected in MIDLANT, ~ \$125M**
  - **52% DB (11 projects)**
  - **43% DBB (9 projects)**
  - **5% SAP (1 projects)**
  - **Program Allocation**
    - Northeast : New London (1); Maine (4); Newport (1)
    - Hampton Roads: Norfolk (7); Yorktown (4); Oceana (3); JEB Little Creek (1)
  - **Types of projects**
    - Large Scale Restoration Modernization
    - Re/retro - commissioning,
    - Lighting Outdoor LED
    - Lighting Indoor
    - Steam Traps
    - Water Conservation

# FY11 & 12 Highlights - US Marine Corps



## Camp Lejeune & New River, N.C.

- **MILCON**
  - **P1400, Marine Corps Energy Initiative project (FY-11)**
    - Bid option to FY09 Energy Reinvestment GCC task order
    - ~ 1MW PV Farm/\$7.5M
- **FSRM (FY11 & FY12)** - dependent on EOY funding availability
  - Project cost range: \$750K - \$3M
- **Types of Projects**
  - EMCS upgrades
  - Advanced Metering
  - DDC/EMCS integration
  - Facility Re-commissioning
  - HID lighting replacement
  - Energy Audits
  - LED Streetlights
  - Smart Thermostats
- **Possible steam decentralization EIP projects in FY12**



# FY11 & 12 Highlights - US Marine Corps Cherry Point, N.C.



- **FSRM (FY11 & FY12)** - dependent on EOY funding availability
  - Project Cost Range: \$100K - \$1M
- **Types of projects**
  - Replace Lighting, Hangar 250
  - Conservation Voltage Regulation System
  - Reclaimed Water for WWTP
  - Install Advanced Energy and Water Meters
  - Various Air Compressor Replacements
  - Install Advanced Energy Meters, Bogue Field
- **Possible steam partial decentralization EIP projects in FY12**
  - Pending study completion

# Concept Project - Wind Turbines



## Naval Station Newport, RI

- **Project Scope of Work:** Construct wind turbines capable of producing up to 9 MW of power at up to 12 sites.
- **Estimated Construction Cost:** \$34 M
- **Ongoing Project Development Studies:**
  - Comprehensive Wind Energy Study: Determine best wind sites for turbines (ECD May 2011)
  - Business Case Analysis: Recommend financing structure
  - Environmental Assessment - Finding of No Significant Impact (FONSI) expected Sept 2011
    - Includes Avian Radar, View Shed, Marine Mammal Observation & Noise/Shadow Flicker Studies
    - Consultations with Local Native American Tribes, CRMC, SHPO, & USFWS. Public meeting held at local school to engage the community
- **Other Siting Considerations:**
  - Federal Aviation Administration - height restrictions
  - Various setback and siting constraints

# Questions?

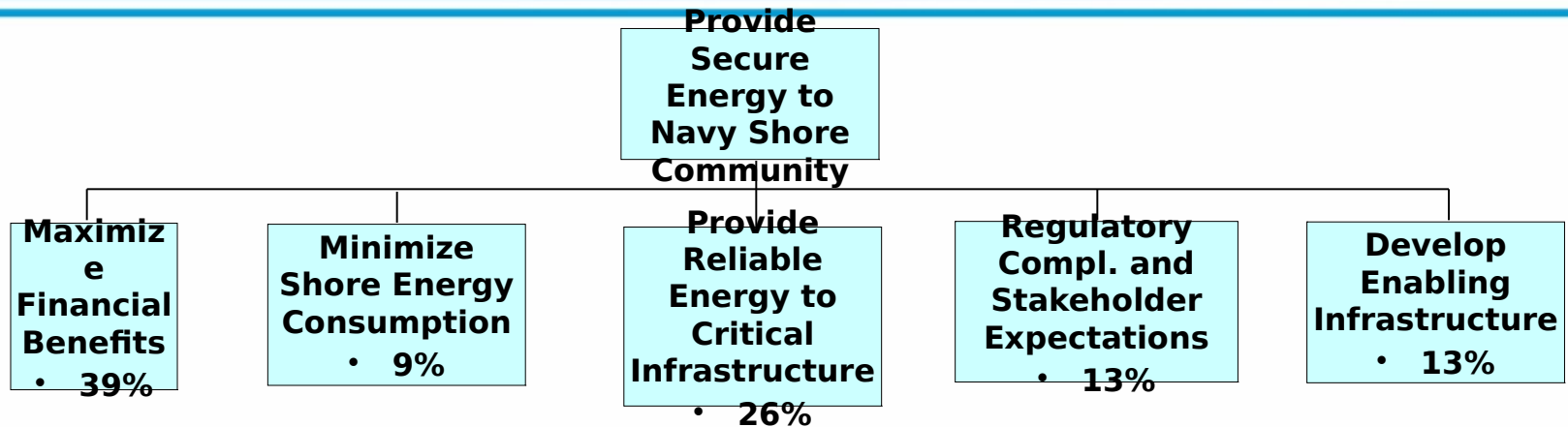
# **BACKUP SLIDES**

# SRM Energy Project Selection



- SRM Energy projects are selected with the help of the eROI tool.
- What is eROI ?
  - The eROI provides a consistent, quantifiable approach to prioritize a portfolio of projects that create value, using criteria that include “hard” benefits, such as cost savings, as well as “soft” benefits, such as meeting stakeholder expectations.
- Why is eROI useful?
  - Using a weighted criteria approach, the eROI tool enables the Navy to rank and compare hundreds of energy projects submitted by installations, then invest in projects that will deliver the best ROI. The eROI tool ultimately creates a Navy-wide, optimized portfolio of energy projects and investments. This optimized portfolio positions Navy to achieve its energy consumption goal with efficient use of resources.
- What does eROI do?
  - Prioritizes projects based on their benefit-to-cost ratios (i.e. “bang-for-the-buck”) and identifies the highest-value portfolio for any given budget constraint.
  - Provides informative graphs and other outputs that facilitate quality control of project data and help communicate results and recommendations
- In addition to SRM Energy Project Selection, eROI tool planned for use as a selection tool for the majority of energy programs for

# eROI Methodology



Metric	Financial Net Present Value (NPV)	Utilities	Scoring Scale • MDI • Outage Exposure • Incremental Backup	Scoring Scale • Mandates • Public Perception • Quality of Service	Scoring Scale • Data Improvement • Energy Flexibility • Tech Adoption
Measure	Dollars	MBTU	Scaling Questions	Scaling Questions	Scaling Questions
Weight	39%	9%	26%	13%	13%

***Individual inputs for a project are incorporated into each strategic driver and, then, scored, weighted, and aggregated into a single performance metric to provide the project's eROI .***